

Peak to Valley Weather

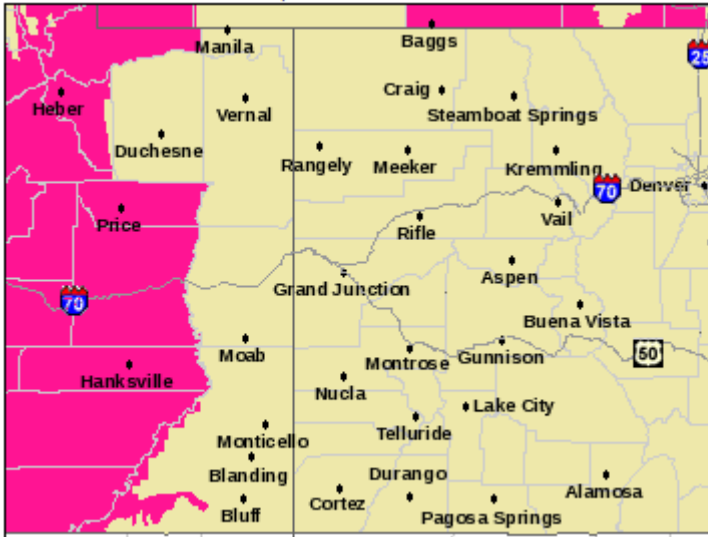
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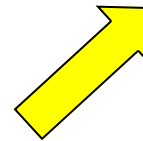
NOW Cast By Dea Bridge, Administrative Support/Joe Ramey, Meteorologist



[Read watches,
warnings &
advisories](#)



[Red Flag Warning](#)
[Fire Weather Watch](#)
[Hazardous Weather
Outlook](#)
[Short Term Forecast](#)



Special Points of Interest

- * **Snow Facts & Measuring**
- * **Same Location - New Address**
- * **Winter Weather Safety**
- * **Vehicle Tips**
- * **Teachers' Resources**
- * **NWS Researchers**

Q. Why do I see a green colored box labeled 'Short Term Forecast' in the key to the right of the weather map, but that color is not reflected directly on the weather map?

A. The Hazardous Weather Outlook has a higher priority on the Point and Click Forecast Map, so it overlays the area where the Short Term Forecast is valid.

Q. Why is the Short Term Forecast important?

A. The Short Term Forecast highlights an impending weather event such as thunderstorms, precipitation, winds, extreme temperatures, winter weather, or fog, expected within the next six hours beyond the current forecast, and does not meet Warning or Advisory criteria.

Q. How can Short Term Forecast be viewed?

A. Click on the Short Term Forecast link at the right of the map (from the [NWS GJT home page](#)) to see what locations are being affected and what the threat is.

Q. What is the primary difference

between the Short Term Forecast and the Hazardous Weather Outlook?

A. The Short Term Forecast is issued for the next 10 minutes to six hours, while the Hazardous Weather Outlook covers a broader and more general timeframe over the next seven days.

Q. Where can I find more information about hazardous weather Advisories, Warnings, or Watches?

A. By going to http://www.crh.noaa.gov/gjt/?n=wwpw_co_day3 (the Weather Preparedness section of the Weather Safety link), you can obtain explanations of each product.

Going Bananas over Autumn Leaves?

By John Kyle, Data Program Manager

Just what do autumn leaves and ripening bananas have in common? Let's take a look. The green color in unripe bananas comes from chlorophyll, the same pigment that gives green leaves their color. As bananas ripen, the chlorophyll breaks down and disappears, revealing the yellow color which has been there all along. Of course, other changes also occur as bananas ripen: the starches change to sugar and the flesh softens as pectin (a carbohydrate) breaks down.

The yellows and oranges of autumn leaves are also revealed as their chlorophyll breaks down. Additionally, the brightest leaf colors are seen when late summer is dry, and autumn has bright sunny days and cool nights (low 40's Fahrenheit), when trees make a lot of anthocyanin pigments. A fall with cloudy days and warm nights brings drab colors. An early frost quickly ends the beautiful fall foliage color display.



Winterizing Your Rain Gauge

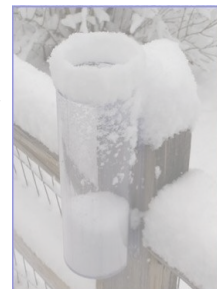
By Jim Pringle, Warning Coordination Meteorologist

If you have a plastic **wedge shaped** rain gauge, you will need to begin closely monitoring the temperature forecasts so that your gauge is brought indoors before freezing temperatures occur. Leaving the plastic wedge shaped rain gauge outside during the winter can result in the collected water freezing at the bottom, causing the gauge to become cracked and unusable.



If you have the **standard 4" cylindrical** plastic rain gauge, like those used by CoCoRaHS observers (www.cocorahs.org), you can leave your gauge outside during the winter months. However, make sure

you bring the inner cylinder and funnel indoors to avoid breakage from freezing water. The 4" gauge will come in handy during the winter for measuring snow water equivalent. Make sure you have your yard stick available for measuring snowfall, as the winter season is just around the corner! We very much appreciate and need your snowfall reports.



If you are in need of supplies, please email our office at wxgjt@noaa.gov.

Check the Road

By Dea Bridge, Administrative Support Assistant

As the hazardous driving season approaches, the Grand Junction forecast office receives many calls with requests for road condition information. It is important to understand that while meteorologists can reasonably provide information about weather conditions in a specific area, for instance Vail Pass, they do not have the capability to know what the road conditions may be.



The Colorado Department of Transportation (CDOT) monitors these conditions, knows the plowing or sanding schedules, is responsible for closures, and is in a much better position to provide accurate road information.

Current road conditions can be obtained for Colorado by calling CDOT at 1-877-315-7623 or by visiting <http://www.cotrip.org>. You can also dial '511' for local reports, but you must be calling from the state for which you are requesting information. The web link contains the latest road conditions, construction closures, traffic speeds, travel times, and webcams with real-time highway information. Additionally, you can check conditions for neighboring states including Arizona, Kansas, Nebraska, New Mexico, Oklahoma, Utah and Wyoming. The direct dial number for Utah conditions is 1-800-492-2400 or visit <http://commuterlink.utah.gov>.



Windchill Kills!

Did you know that with a temperature of 0 degrees Fahrenheit and a 15 mph wind, the wind chill is -19 degrees Fahrenheit. At this wind chill temperature, exposed skin can freeze in 30 minutes! Find out more about this silent, but deadly, winter hazard by visiting <http://www.weather.gov/om/windchill/>.



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Winter Weather Preparedness Week in COLORADO & UTAH is October 24-30
(This site will soon be updated with 2010 dates-check back!)



WINTER VEHICLE SAFETY CHECKLIST

Assemble easily accessible winter survival kits for your vehicles. Consider including:

- Water/food (high energy snacks/powdered drink mixes)
- Three-pound coffee can, candles and matches to be used to melt snow for additional drinking water
- Metal or plastic cup

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The Science Behind Snowfall Reports By Megan Schwitzer, Meteorologist

Throughout the winter season, the National Weather Service relies on snowfall reports from Cooperative Observers, Spotters, and the general public, in order to provide our users with the most up to date and accurate forecasts. Here are a few tips to keep in mind when measuring snowfall this year:

Preparation:

- Find a ruler/yard stick to use for measurements
- Find an open location with good exposure...should be away from trees, buildings, or obstructions that cause blowing/drifted snow
- Measuring surface should be flat, level, and easily accessible. Also look for grassy or dirt areas; avoid rocky, concrete or paved areas.

What to Report:

New Snowfall Accumulation

- Amount of snow that has fallen since last observation
- Measure to nearest tenth of an inch (ex: 6.5 inches)
- Measure at eye level (reading from a horizontal, not vertical, vantage

point)

- Take measurements as quickly as possible after snow's end
- When snowfall depths vary over an area, take an average
- Report as frequently as possible, but do not clear snow surface more than once every six hours; this inflates measurements

Total Snow Depth

- Total amount of old and new snow on the ground
- Measure to the nearest whole inch

Where to Report:

Send your snowfall reports to our office in Grand Junction via email at: wxgjt@noaa.gov.

If you're interested in becoming a National Weather Service storm spotter, please contact our office, via the information listed above.

See the link below if you're interested in becoming a CoCoRaHS Spotter!
<http://www.cocorahs.org/>

For a complete training slideshow on how to measure snowfall, go to:

<http://www.cocorahs.org/media/docs/Measuring%20Snow-National-Training%201.1.pdf>



Grand Junction Snow Facts

Average annual snowfall:
21.5 inches

2009/2010: 25.7 inches

Record annual snowfall:
1919: 65.7 inches

First Measurable Snowfall

Average: November 17
Earliest: September 18th, 1965
Latest: December 26th, 1944

Really?

By Paul Frisbie, Senior Meteorologist

Did You Know...

- ♦ **Grand Junction ranks 8th in the least humid cities (average relative humidity 48%)**
- ♦ **Alamosa is one of the driest (ranks 6th) and coldest (ranks 8th) cities in the United States**
- ♦ **Colorado is the 7th driest state**
- ♦ **Grand Junction's wettest month occurred in October 1972, with an impressive 3.45 inches of rain**
- ♦ **Salt Lake City and Denver, 8th and 9th respectively, rate as good places to live if you suffer from allergies**

Address Change

You might have noticed changes at the Grand Junction Regional Airport and surrounding area over the past year or so. As a result, the National Weather Service forecast office has been assigned a new street/ mailing address. We have not physically moved, but our new address is **2844 Aviators Way**. As always, you can continue to reach us by phone, 24 hours a day, at 970-243-7007 for the latest weather information.

The forecasters at Weather Forecast Office (WFO) Grand Junction routinely review forecasts of significant weather events to further understand the complex interactions of weather patterns across the western United States.

Recently, our office participated in the 14th Annual Mountain Meteorology Conference sponsored by the American Meteorological Association (AMS) near Lake Tahoe, California. Science and Operations Officer (SOO), Michael Meyers, PhD, chaired this event with over 150 participants from around the globe sharing their knowledge on weather patterns and forecasting in complex terrain. Senior Meteorologist Jeff Colton accompanied Dr. Meyers on this trip where together they presented four case studies which the staff had been working on over the past two years. Research cases

ranging from orographic snowfall (snowfall affected by hills and mountains) near Ouray, Colorado to heavy snow bursts near Steamboat Springs were presented, along with radar studies over the Gunnison River Valley and the Four Corners. The sharing of knowledge with the international community allows the local forecast office to relay concerns on how computer models are performing.

In early October, Senior Forecaster Paul Frisbie and Meteorologist-in-Charge (MIC) Douglas Crowley will be traveling to a National Weather Association Conference to share work on a locally developed lightning forecast system. The system, being developed by Mr. Frisbie, will allow forecasters to better predict the anticipated occurrence of lightning over an area. Confidence in this new science is growing and we

hope that sharing this information

with other forecasters will allow further expansion of the project.

The research does not stop there, as Journey Forecaster Joe Ramey and the MIC will also be in Leadville, CO to participate in an avalanche conference. Mr. Ramey, the local office climatologist, will be sharing his winter predictions at this conference based on years of research and the study of past climate patterns related to El Nino and La Nina.

The Grand Junction weather office continually works to improve the forecasting probabilities through its active research and sharing of information with surrounding offices, universities and international scientists.



Vehicle Safety

continued from page 2

- First aid kit, including essential medications
- Red bandanna/plastic whistle to alert rescuers
- Pencil and paper
- Plastic flashlight with spare batteries (reverse batteries to avoid accidental switching and burn-out; replace batteries yearly)
- Gloves or mittens, winter boots, a blanket and/or sleeping bag
- Jumper cables, a basic toolbox, shovel, sand or kitty litter
- Tow cable or chain, road flares and reflectors.
- Extra set of dry clothing or a snowmobile suit.

Whenever traveling in winter, call someone at your intended destination; let them know when you intend to leave, your travel route, and expected time of arrival. If stranded, never leave your vehicle. Chances of survival greatly increase if you stay put.



Happy Autumn Days!

Image Gallery

By Dea Bridge, Administrative Support

Do you have an outstanding weather related photograph that you'd like to share? Become part of the Grand Junction Weather office's **Image Gallery** by submitting your photo or video. Be sure to check the [submission rules](#) before posting. We'd like to showcase your local weather photos as a means of helping educate the public about weather hazards and phenomena common to Western Colorado and Eastern Utah. Our existing archive, is available by going to the [Image Gallery](#) page. We look forward to seeing your view of this area we call home!